

CLAIMS

1. A motor vehicle structural element (3) of the type comprising a cross-member (4) and, at at least one end (5) of the cross-member, a first nut (10; 10, 94; 94) presenting a tapped bore (14; 14, 95; 95) for receiving a screw (11) for fastening the cross-member to an upright (2) of the vehicle, the axis of the bore being substantially parallel to the director line (L) of the cross-member, the element being characterized in that it comprises a first cage (20; 20, 96; 96) for preventing the nut (10) from turning about the axis of its tapped bore, the first cage (20; 20, 96; 96) being mounted at said end (5) of the cross-member, and the nut (10) being free to move in the first cage in translation substantially perpendicularly to the axis of its bore.
2. An element according to claim 1, characterized in that the first cage (20) is mounted at the end (5) of the cross-member by welding.
3. An element according to claim 1 or claim 2, characterized in that the first cage (20) is mounted at the end (5) of the cross-member (4) by screw fastening.
4. An element according to any preceding claim, characterized in that the first cage (20; 20, 96; 96) is mounted at the end (5) of the cross-member (4) by crimping.
5. An element according to any preceding claim, characterized in that it includes a sleeve (18) via which the first cage (20) is mounted to the end (5) of the cross-member (4).
6. An element according to claim 5, characterized in that it further comprises a plate (16) secured to the sleeve (18) and on which the cage (20) is provided.

7. An element according to any preceding claim,
characterized in that it includes a spacer device (12)
for co-operating with the screw (11) to bear against the
5 end (5) of the cross-member (4) and against the upright
(2) along the director line (L) of the cross-member (8).

8. An element according to claim 7, characterized in that
a helical connection is provided between the first cage
10 (96) and the end (5) of the cross-member (4), said
helical connection being oppositely handed relative to
the helical connection that arises from the screw (11)
being screwed into the first nut (94), so that the first
cage (96) comes to bear against the upright (2) along the
15 director line (L) of the cross-member (4) while the screw
(11) is being screwed into the first nut (94).

9. A structural element according to claim 7,
characterized in that the spacer device (12) comprises a
20 second nut (94) presenting a tapped bore (95) for
receiving the screw (11), the axis of the bore being
substantially parallel to the director line (L) of the
cross-member (4), in that the spacer device (12) further
comprises a second cage (96) for preventing the second
25 nut (94) from turning about the axis of its bore (95),
and in that a helical connection is provided between the
second cage (96) and the end (5) of the cross-member (4),
said helical connection being oppositely handed relative
to the helical connection that arises from screwing the
30 screw (11) into the second nut, so that the second cage
(96) comes to bear against the upright (2) along the
director line (L) of the cross-member (4) while the screw
(11) is being screwed into the second nut (94).

35 10. A structural element according to any preceding
claim, characterized in that the cross-member (4) is a
cross-member for supporting a motor vehicle dashboard.

11. A motor vehicle, characterized in that it includes a structural element according to any preceding claim.